

# SRS ENERGY PARK

## DOE-SR Outlook on an SRS Energy Park Presentation to the Savannah River Site Citizens Advisory Board

July 27, 2010

**Karen Guevara, Assistant Manager for Closure Project  
Department of Energy Savannah River Operations Office**



# SRS ENERGY PARK

**Does an Energy Park fit within SRS's existing mission?**

- **DOE-EM is the Savannah River Site landlord**
- **EM's mission is environmental cleanup, resulting in footprint reduction**
- **EM also provides infrastructure support to all Site missions**
- **Accelerated SRS cleanup will make areas available for other uses**
- **May have infrastructure in excess of continuing mission needs**



# SRS ENERGY PARK

**Does DOE have an Energy Park policy?**

- **DOE has well-established process for land transfer**
- **DOE lacks a policy and/or legislation that allows the development of an energy park**
- **Currently at SRS DOE has no leased land or facilities for energy research or production**



# SRS ENERGY PARK

## What DOE policies exist for SRS Energy Park?

- **No DOE-wide policy on Energy Park use for sites**
  - Beyond existing EM mission
- **Authorization legislation has been introduced in both Houses of Congress**
  - **S.3454, Sec. 3131:** The Secretary of Energy may establish a program to permit the establishment of energy parks on former defense nuclear facilities.
  - **S.3454 Report language:** The committee does not support energy parks at the present time at defense nuclear facilities but would entertain proposals to establish such facilities on a case-by-case basis if an energy park would have no impact on national security activities.
  - **H.R.5136, Sec. 3112:** The Secretary of Energy may facilitate the establishment of energy parks ... on defense nuclear facility reuse property through the use of collaborative partnerships with state and local governments, the private sector, and community reuse organizations approved by the Secretary.



# SRS ENERGY PARK

## Recommendations

- The Energy Communities Alliance has recommended a cross-cutting office at the Secretarial level to provide leadership and coordination
- The Environmental Management Advisory Board has recommended that EM sites survey their physical assets that could be useful for energy parks



# SRS ENERGY PARK

- Secretary of Energy Nuclear Energy policies
  - Yucca Mountain Repository
  - Blue Ribbon Panel
  - Funding request for innovative reactor technologies
  - Advanced reactors to harness more energy from uranium
  - Advanced concepts to potentially burn used nuclear fuel or nuclear waste



# SRS ENERGY PARK

- **Stakeholder Interests**
  - There is no DOE-wide policy or direction from the Secretarial level
  - National energy policy, carbon footprint reduction, role of nuclear power in the energy mix
  - The pace of development is slow, with the end of Recovery Act employment looming
  - Interest in new missions
  - General support for renewables and green energy
  - Strongly held positions, pro and con, on siting nuclear facilities at SRS
  - County employment and tax base



# SRS ENERGY PARK

**What is the process for DOE land transfers?**

- **Title 10 Code of Federal Regulations, Part 770, *Transfer of Real Property at Defense Nuclear Facilities for Economic Development***
- **EM has augmented this with an internal procedure**
- **10 CFR 770 allows:**
  - DOE sites to disclose surplus land or facilities available for transfer
  - Outside entities to propose transfer of land or facilities to foster local economic development
- **National Environmental Policy Act (NEPA) review and its public involvement opportunities an integral part**
- **10 CFR 770 nor EM procedure aimed at development of energy industries**





# SRS ENERGY PARK

**What progress has DOE-SR made in defining an SRS energy park?**

- **Listened to interests and issues**
  - **Public Energy Park meetings in August 2009 and April 2010**
- **Savannah River Site Community Reuse Organization interest**
  - **Recommendations on preparing an adequate proposal under 10 CFR 770**
- **Upcoming meetings with business and community leaders to define a broad energy park vision and outline business cases**
- **Interest in renewable energy projects at SRS**
- **Long-term Energy Freedom Center concept**



# SRS ENERGY PARK

Energy Park development guided by SRS Strategic Plan:

With more than 310 square miles of government-owned land area, excellent transportation links and extensive infrastructure, SRS provides the foundation to accommodate a wide range of federal initiatives and new missions for both DOE and other national organizations.

Planning Assumptions:

- SRS is a national asset which will endure beyond current EM and NNSA missions
- Infrastructure assets and critical support functions will be maintained and upgraded to support current and future missions
- SRS will support DOE's strategic goals in the establishment of mission which most effectively utilize the Site's unique assets and capabilities in the national interest
- SRS will maintain its current physical boundary of 310 square miles



# SRS ENERGY PARK

**Energy Park development is guided by assessment of assets and available resources :**

- **Excess capacity**
  - Domestic Water
  - River Water
  - Sanitary Wastewater Treatment
- **Available Infrastructure**
  - Electrical grid, excess capacity purchased through SCE&G
  - Roads and Railroads: dependent on Site area; limited rail spurs
  - Communications: dependent on Site area, copper and fiber-optic network throughout the Site



# SRS ENERGY PARK

## Energy Park development guided by Existing Facilities and Locations

- Make use of physical and programmatic connections
- Matching proposed facilities with specific SRS locations would increase the probability of success
- Existing Facilities could serve as the core of an SRS Energy Park, for example
  - Three Rivers Landfill
  - Biomass Cogeneration Facilities (A-Area and Ameresco)
  - Hydrogen Center of Excellence



# SRS ENERGY PARK

## Some Initial Conclusions

- Development guided by the SRS Strategic Plan, the Site's Infrastructure, and current physical and programmatic connections
- Land would remain under federal ownership, leased following 10 CFR 770 process
- Projects could be privately funded, public-private partnerships, or Federal government projects

